

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P879465

Luminaire Tested: **LD4C60D010 EU4609040 4LBLDWWLI**

Issue Date: 10/1/2024

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P879465
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C60D010 EU4609040 4LBLDWWLI
Description: 4 INCH 6000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LBLDWW TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

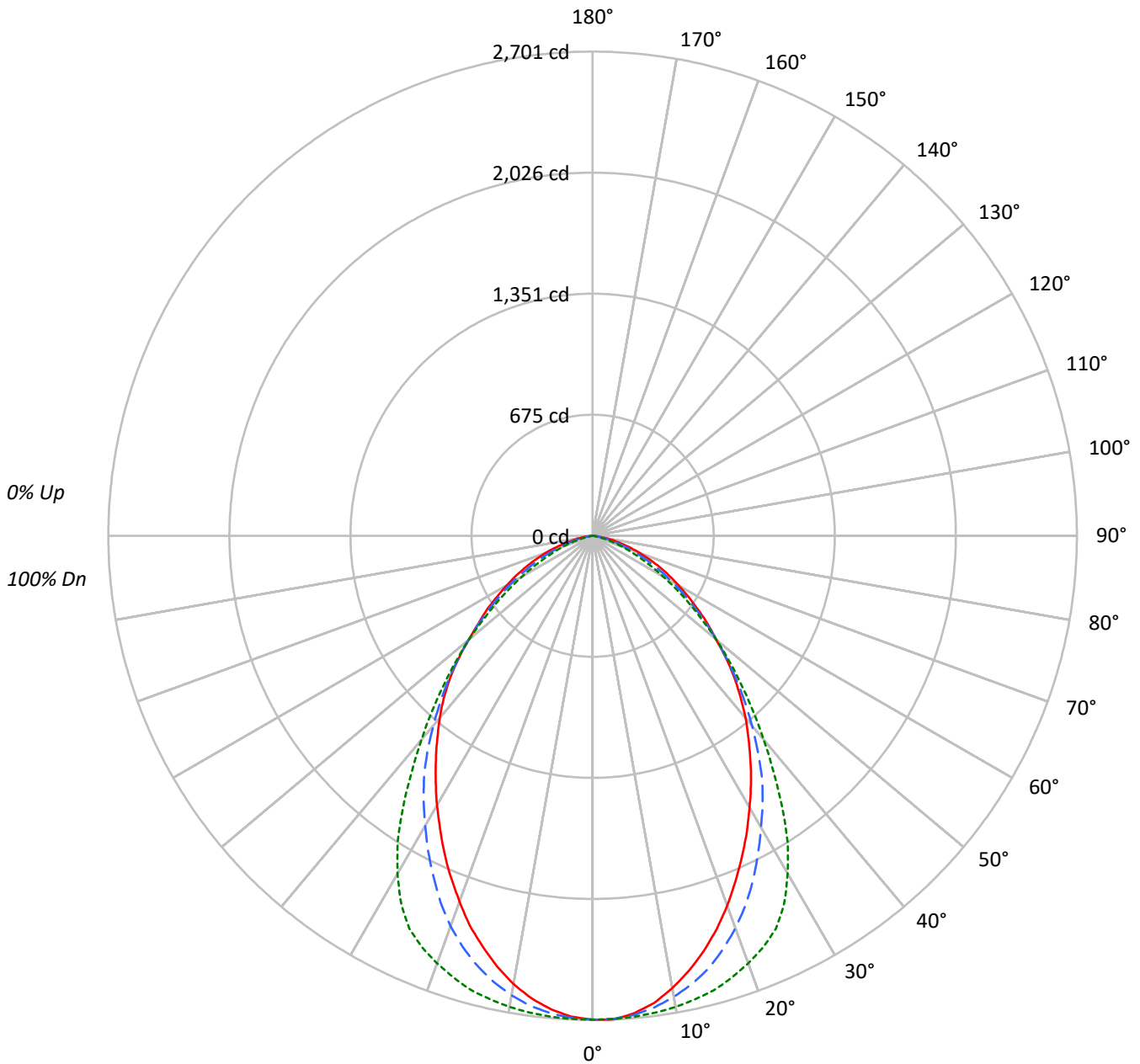
Lumens per Lamp: N/A
Luminaire Lumens: 4957.0 lumens
Efficiency: N/A
Efficacy: 68.8 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.19 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 72
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88			
2	103	96	90	85	100	94	89	84	91	86	83	87	84	81	85	82	79	77			
3	95	86	79	74	93	84	78	73	82	76	72	79	74	70	77	73	69	67			
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59			
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53			
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47			
7	71	59	51	45	69	58	50	45	56	50	45	55	49	45	54	48	44	42			
8	66	54	46	41	65	53	46	41	52	45	41	51	45	40	50	44	40	38			
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35			
10	59	46	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	32			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	331594	331594	331594
5°	329617	332108	327126
10°	319581	332929	316812
15°	304906	333663	301561
20°	286891	331761	283714
25°	267217	327837	265035
30°	248282	308713	246281
35°	230259	276122	228579
40°	212864	238123	212704
45°	193965	203260	195528
50°	171306	171880	172281
55°	153509	140529	154151
60°	135655	111600	135901
65°	119418	85087	118255
70°	98995	60920	98995
75°	77134	34983	74286
80°	50019	8561	47826
85°	18466	2819	14237



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.4	5.1
10°-20°	701.0	14.1
20°-30°	979.9	19.8
30°-40°	1033.7	20.9
40°-50°	879.3	17.7
50°-60°	620.5	12.5
60°-70°	351.7	7.1
70°-80°	125.5	2.5
80°-90°	12.0	0.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1934.3	39.0
0°-40°	2967.9	59.9
0°-60°	4467.8	90.1
0°-90°	4957.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4957.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2699	2699	2699	2699	2699	
5°	2673	2682	2693	2674	2653	252
15°	2397	2498	2623	2484	2371	672
25°	1971	2119	2418	2100	1955	907
35°	1535	1646	1841	1637	1524	960
45°	1116	1132	1170	1138	1125	858
55°	717	692	656	694	720	644
65°	411	352	293	353	407	407
75°	162	111	74	109	156	176
85°	13	5	2	5	10	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1
2.5°	2701.1	2696.0	2696.0	2696.0	2696.0	2696.0	2696.0	2696.0	2696.0	2697.0	2697.0
5°	2672.8	2670.8	2669.8	2669.8	2669.8	2669.8	2670.8	2674.8	2676.9	2679.9	2681.9
7.5°	2628.4	2624.4	2626.4	2626.4	2628.4	2630.4	2633.4	2637.5	2643.5	2647.6	2652.6
10°	2561.8	2557.7	2562.8	2564.8	2570.9	2573.9	2578.9	2585.0	2597.1	2603.2	2611.2
12.5°	2484.1	2482.0	2484.1	2492.1	2498.2	2502.2	2508.3	2521.4	2533.5	2546.6	2560.8
15°	2397.3	2392.2	2395.2	2405.3	2415.4	2422.5	2427.5	2444.7	2460.8	2481.0	2498.2
17.5°	2300.4	2293.3	2301.4	2309.4	2322.6	2328.6	2335.7	2354.9	2377.1	2399.3	2418.5
20°	2194.4	2192.4	2197.4	2208.5	2221.6	2229.7	2235.8	2257.0	2276.1	2306.4	2328.6
22.5°	2084.4	2086.4	2090.4	2102.5	2111.6	2122.7	2131.8	2151.0	2173.2	2201.4	2229.7
25°	1971.3	1974.3	1981.4	1989.5	2004.6	2010.7	2021.8	2042.0	2061.1	2087.4	2118.7
27.5°	1862.3	1863.3	1871.4	1875.4	1889.5	1902.7	1907.7	1928.9	1951.1	1971.3	1998.6
30°	1750.2	1753.3	1758.3	1769.4	1783.6	1788.6	1794.7	1813.8	1831.0	1856.2	1877.4
32.5°	1643.3	1641.2	1647.3	1653.3	1669.5	1678.6	1681.6	1703.8	1719.0	1744.2	1764.4
35°	1535.3	1530.2	1539.3	1545.3	1559.5	1567.6	1571.6	1588.7	1602.9	1624.1	1646.3
37.5°	1427.3	1431.3	1435.3	1440.4	1447.4	1449.5	1461.6	1465.6	1483.8	1499.9	1512.0
40°	1327.3	1325.3	1323.3	1328.3	1337.4	1341.5	1342.5	1353.6	1357.6	1373.8	1382.8
42.5°	1220.3	1221.3	1220.3	1221.3	1226.4	1226.4	1229.4	1236.5	1239.5	1244.6	1255.7
45°	1116.4	1116.4	1113.3	1114.3	1115.4	1114.3	1115.4	1118.4	1124.4	1124.4	1132.5
47.5°	1008.4	1006.3	1010.4	1007.4	1005.3	1004.3	1007.4	1004.3	1010.4	1010.4	1012.4
50°	896.3	896.3	901.4	900.4	902.4	898.3	899.3	899.3	900.4	899.3	903.4
52.5°	809.5	807.5	805.5	800.4	802.4	798.4	798.4	799.4	796.4	795.4	790.3
55°	716.7	718.7	715.6	713.6	713.6	709.6	708.6	702.5	698.5	695.5	692.4
57.5°	632.9	634.9	633.9	628.8	622.8	623.8	621.8	615.7	606.6	600.6	595.5
60°	552.1	554.1	552.1	547.1	545.1	541.0	540.0	531.9	524.9	516.8	510.7
62.5°	479.5	479.5	478.4	471.4	466.3	467.3	462.3	456.2	447.2	436.0	427.0
65°	410.8	409.8	404.8	401.7	397.7	392.6	389.6	380.5	373.5	364.4	352.3
67.5°	342.2	339.1	337.1	334.1	325.0	324.0	320.0	311.9	301.8	294.7	284.6
70°	275.6	274.5	270.5	270.5	263.4	260.4	254.4	247.3	238.2	228.1	220.0
72.5°	218.0	216.0	212.0	207.9	201.9	199.9	194.8	187.7	179.7	169.6	159.5
75°	162.5	160.5	159.5	154.4	149.4	144.3	142.3	135.3	127.2	120.1	111.0
77.5°	114.1	112.0	109.0	106.0	103.0	99.9	96.9	90.8	83.8	77.7	69.6
80°	70.7	68.6	66.6	65.6	62.6	61.6	57.5	54.5	48.4	44.4	39.4
82.5°	36.3	36.3	34.3	33.3	31.3	30.3	29.3	26.2	23.2	20.2	17.2
85°	13.1	13.1	12.1	11.1	11.1	10.1	10.1	9.1	7.1	7.1	5.0
87.5°	1.0	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1
2.5°	2698.0	2697.0	2698.0	2698.0	2699.1	2699.1	2699.1	2698.0	2699.1	2698.0	2698.0
5°	2681.9	2684.9	2686.9	2689.0	2690.0	2691.0	2691.0	2692.0	2693.0	2693.0	2692.0
7.5°	2656.7	2662.7	2668.8	2672.8	2674.8	2676.9	2679.9	2681.9	2683.9	2682.9	2681.9
10°	2623.4	2633.4	2641.5	2649.6	2653.6	2656.7	2661.7	2665.7	2667.8	2668.8	2665.7
12.5°	2575.9	2590.0	2603.2	2616.3	2622.3	2626.4	2636.5	2643.5	2647.6	2647.6	2644.6
15°	2516.4	2536.5	2555.7	2572.9	2583.0	2589.0	2604.2	2614.3	2620.3	2623.4	2618.3
17.5°	2444.7	2467.9	2491.1	2513.3	2523.4	2532.5	2553.7	2567.8	2581.0	2583.0	2576.9
20°	2352.8	2382.1	2408.4	2435.6	2446.7	2460.8	2485.1	2508.3	2528.5	2537.6	2520.4
22.5°	2249.9	2282.2	2306.4	2339.7	2354.9	2370.0	2401.3	2430.6	2465.9	2485.1	2454.8
25°	2142.9	2170.1	2199.4	2231.7	2252.9	2269.1	2305.4	2342.7	2390.2	2418.5	2376.1
27.5°	2027.8	2052.1	2087.4	2122.7	2138.9	2159.0	2202.4	2242.8	2288.2	2313.5	2282.2
30°	1908.7	1939.0	1972.3	2004.6	2027.8	2047.0	2082.3	2116.7	2155.0	2176.2	2153.0
32.5°	1790.6	1819.9	1848.2	1883.5	1896.6	1913.8	1945.1	1974.3	2003.6	2022.8	1995.5
35°	1666.5	1692.7	1719.0	1743.2	1749.2	1769.4	1794.7	1811.8	1826.0	1841.1	1822.9
37.5°	1531.2	1551.4	1564.5	1590.8	1600.9	1603.9	1624.1	1636.2	1651.3	1654.4	1653.3
40°	1393.9	1412.1	1423.2	1439.4	1447.4	1447.4	1461.6	1472.7	1483.8	1484.8	1483.8
42.5°	1265.8	1274.8	1283.9	1294.0	1292.0	1304.1	1310.2	1315.2	1323.3	1323.3	1325.3
45°	1136.6	1143.6	1151.7	1153.7	1161.8	1161.8	1166.8	1168.9	1172.9	1169.9	1165.8
47.5°	1016.4	1019.5	1020.5	1029.6	1031.6	1024.5	1030.6	1031.6	1030.6	1030.6	1028.5
50°	902.4	904.4	903.4	900.4	901.4	904.4	901.4	897.3	899.3	899.3	901.4
52.5°	791.3	787.3	785.3	785.3	781.3	781.3	776.2	774.2	773.2	769.1	774.2
55°	689.4	683.3	674.3	672.2	669.2	668.2	662.1	657.1	655.1	656.1	655.1
57.5°	591.5	582.4	576.4	574.3	571.3	565.2	558.2	553.1	552.1	550.1	550.1
60°	502.7	492.6	483.5	474.4	475.4	471.4	464.3	461.3	458.3	454.2	457.2
62.5°	421.9	410.8	400.7	391.6	385.6	382.6	377.5	372.5	369.4	366.4	370.4
65°	342.2	333.1	322.0	312.9	309.9	306.8	301.8	293.7	292.7	292.7	294.7
67.5°	270.5	260.4	250.3	244.3	240.2	236.2	234.2	230.1	227.1	225.1	226.1
70°	207.9	197.8	189.8	183.7	180.7	179.7	172.6	171.6	170.6	169.6	168.6
72.5°	151.4	143.3	136.3	132.2	128.2	125.2	123.1	120.1	119.1	119.1	119.1
75°	104.0	97.9	89.8	84.8	82.8	79.7	76.7	74.7	72.7	73.7	73.7
77.5°	62.6	56.5	51.5	47.4	46.4	43.4	40.4	38.4	35.3	35.3	36.3
80°	34.3	29.3	25.2	22.2	20.2	19.2	16.1	15.1	13.1	12.1	12.1
82.5°	15.1	12.1	10.1	9.1	8.1	7.1	6.1	5.0	5.0	4.0	5.0
85°	5.0	4.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
87.5°	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1
2.5°	2697.0	2697.0	2696.0	2696.0	2696.0	2694.0	2694.0	2693.0	2692.0	2691.0	2689.0
5°	2690.0	2689.0	2686.9	2685.9	2684.9	2681.9	2678.9	2676.9	2673.8	2669.8	2667.8
7.5°	2679.9	2676.9	2672.8	2670.8	2667.8	2660.7	2655.7	2650.6	2645.6	2638.5	2630.4
10°	2662.7	2656.7	2650.6	2646.6	2641.5	2632.4	2622.3	2614.3	2603.2	2593.1	2582.0
12.5°	2638.5	2631.4	2619.3	2613.3	2607.2	2594.1	2581.0	2563.8	2548.7	2534.5	2521.4
15°	2608.2	2595.1	2581.0	2572.9	2563.8	2542.6	2522.4	2504.2	2484.1	2466.9	2445.7
17.5°	2563.8	2544.6	2524.4	2515.4	2503.2	2479.0	2454.8	2429.6	2406.3	2385.1	2358.9
20°	2497.2	2476.0	2449.7	2435.6	2425.5	2393.2	2370.0	2341.7	2317.5	2291.3	2262.0
22.5°	2419.5	2390.2	2360.9	2340.7	2329.6	2297.3	2266.0	2240.8	2214.6	2184.3	2163.1
25°	2331.6	2295.3	2260.0	2239.8	2222.6	2188.3	2158.0	2131.8	2099.5	2073.2	2052.1
27.5°	2232.7	2191.3	2150.0	2129.8	2113.6	2076.3	2044.0	2016.7	1985.4	1962.2	1940.0
30°	2114.6	2077.3	2037.9	2021.8	2002.6	1964.2	1926.9	1902.7	1868.3	1844.1	1819.9
32.5°	1967.3	1943.0	1911.7	1889.5	1879.4	1844.1	1812.8	1783.6	1754.3	1735.1	1710.9
35°	1805.8	1784.6	1758.3	1746.2	1733.1	1710.9	1685.6	1660.4	1637.2	1619.0	1596.8
37.5°	1642.2	1621.0	1604.9	1591.8	1583.7	1563.5	1548.4	1529.2	1513.0	1495.9	1483.8
40°	1472.7	1466.6	1449.5	1443.4	1441.4	1419.2	1406.1	1390.9	1380.8	1370.7	1363.7
42.5°	1322.3	1312.2	1299.1	1300.1	1294.0	1281.9	1272.8	1262.7	1255.7	1250.6	1243.5
45°	1173.9	1165.8	1159.8	1164.8	1154.7	1150.7	1143.6	1142.6	1137.6	1128.5	1125.4
47.5°	1032.6	1031.6	1032.6	1029.6	1027.5	1025.5	1026.5	1021.5	1016.4	1013.4	1009.4
50°	903.4	904.4	906.4	909.4	902.4	905.4	904.4	903.4	903.4	900.4	902.4
52.5°	778.2	779.2	781.3	784.3	785.3	785.3	788.3	790.3	794.4	799.4	799.4
55°	660.1	667.2	671.2	676.3	673.3	679.3	682.3	691.4	694.4	694.4	698.5
57.5°	555.2	562.2	565.2	571.3	573.3	578.4	586.4	591.5	598.6	604.6	610.7
60°	459.3	462.3	470.4	479.5	477.4	489.5	495.6	503.7	512.8	516.8	524.9
62.5°	373.5	377.5	383.6	386.6	393.7	399.7	413.8	421.9	430.0	440.1	448.2
65°	296.8	300.8	306.8	312.9	315.9	325.0	332.1	346.2	353.3	364.4	373.5
67.5°	227.1	233.2	238.2	242.2	244.3	253.4	264.5	270.5	283.6	294.7	301.8
70°	169.6	174.6	180.7	179.7	183.7	190.8	198.8	207.9	218.0	228.1	236.2
72.5°	118.1	123.1	127.2	128.2	132.2	137.3	143.3	150.4	158.5	168.6	179.7
75°	74.7	75.7	79.7	81.8	83.8	89.8	94.9	101.9	109.0	117.1	124.2
77.5°	37.3	40.4	42.4	44.4	45.4	50.5	55.5	61.6	67.6	75.7	82.8
80°	14.1	15.1	18.2	19.2	21.2	24.2	28.3	31.3	36.3	42.4	46.4
82.5°	5.0	6.1	7.1	7.1	8.1	10.1	11.1	14.1	17.2	19.2	21.2
85°	2.0	2.0	2.0	2.0	2.0	3.0	3.0	4.0	5.0	6.1	6.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P879465

CATALOG NUMBER: LD4C60D010 EU4609040 4LBLDWWLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1	2699.1
2.5°	2688.0	2688.0	2686.9	2685.9	2685.9	2685.9	2684.9	2684.9
5°	2663.7	2660.7	2659.7	2657.7	2656.7	2655.7	2652.6	2652.6
7.5°	2624.4	2620.3	2617.3	2614.3	2610.2	2607.2	2607.2	2603.2
10°	2571.9	2563.8	2559.8	2555.7	2550.7	2544.6	2542.6	2539.6
12.5°	2508.3	2492.1	2488.1	2481.0	2473.0	2468.9	2461.9	2461.9
15°	2429.6	2412.4	2403.3	2399.3	2389.2	2382.1	2379.1	2371.0
17.5°	2337.7	2324.6	2310.4	2304.4	2293.3	2284.2	2280.2	2279.2
20°	2244.8	2223.6	2214.6	2205.5	2192.4	2184.3	2178.2	2170.1
22.5°	2137.8	2118.7	2105.5	2099.5	2088.4	2074.3	2064.2	2064.2
25°	2024.8	2007.6	2000.6	1987.5	1974.3	1969.3	1957.2	1955.2
27.5°	1916.8	1899.6	1885.5	1878.4	1863.3	1856.2	1846.1	1842.1
30°	1804.8	1784.6	1774.5	1773.5	1755.3	1748.2	1740.2	1736.1
32.5°	1692.7	1675.6	1665.5	1659.4	1651.3	1639.2	1632.2	1628.1
35°	1581.7	1570.6	1561.5	1554.4	1541.3	1535.3	1529.2	1524.1
37.5°	1465.6	1455.5	1451.5	1445.4	1439.4	1428.3	1426.2	1422.2
40°	1353.6	1340.4	1340.4	1336.4	1330.4	1329.3	1326.3	1326.3
42.5°	1236.5	1230.4	1229.4	1230.4	1226.4	1224.4	1221.3	1228.4
45°	1120.4	1123.4	1118.4	1119.4	1117.4	1121.4	1121.4	1125.4
47.5°	1013.4	1009.4	1011.4	1013.4	1016.4	1016.4	1015.4	1014.4
50°	899.3	903.4	907.4	902.4	904.4	905.4	900.4	901.4
52.5°	801.4	802.4	805.5	802.4	805.5	804.5	806.5	802.4
55°	706.6	706.6	710.6	711.6	712.6	715.6	716.7	719.7
57.5°	614.7	619.8	624.8	623.8	627.8	631.9	628.8	631.9
60°	535.0	539.0	544.1	546.1	549.1	551.1	551.1	553.1
62.5°	454.2	462.3	466.3	470.4	470.4	474.4	478.4	479.5
65°	381.5	390.6	393.7	396.7	398.7	402.7	407.8	406.8
67.5°	312.9	319.0	323.0	325.0	331.1	333.1	337.1	341.2
70°	245.3	253.4	256.4	260.4	265.5	269.5	273.5	275.6
72.5°	187.7	193.8	195.8	199.9	204.9	208.9	211.0	214.0
75°	131.2	141.3	142.3	145.3	149.4	154.4	157.5	156.5
77.5°	86.8	93.9	94.9	98.9	103.0	107.0	108.0	109.0
80°	51.5	55.5	56.5	58.5	61.6	63.6	65.6	67.6
82.5°	24.2	26.2	28.3	28.3	30.3	32.3	32.3	33.3
85°	8.1	8.1	9.1	9.1	10.1	10.1	11.1	10.1
87.5°	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)